

FILE 'REGISTRY' ENTERED AT 16:38:17 ON 03 JUL 2007  
 L1 STRUCTURE UPLOADED  
 L2 STRUCTURE UPLOADED  
 L3 0 S L1  
 L4 0 S L2  
 L5 9 S L1 SSS FULL  
 L6 0 S L2 SSS FULL  
  
 FILE 'STNGUIDE' ENTERED AT 16:40:05 ON 03 JUL 2007  
  
 FILE 'HCAPLUS' ENTERED AT 16:41:47 ON 03 JUL 2007  
 L7 7 S L5  
 L8 1088933 S (NUCLEIC(W)ACID OR DNA OR RNA)  
 L9 8739 S (SHORT(W)INTERFERING(W)RNA) OR SIRNA  
 L10 30 S (CLUSTER(W)GLYCOSIDE)  
 L11 22056 S GLUCOSAMINE  
 L12 216523 S ENDOCYTOSIS OR (DRUG(W)DELIVERY)  
  
 FILE 'STNGUIDE' ENTERED AT 16:42:36 ON 03 JUL 2007  
  
 FILE 'HCAPLUS' ENTERED AT 16:43:43 ON 03 JUL 2007  
 L13 0 S L8 AND L10 AND L11  
 L14 702 S L9 AND L12  
  
 FILE 'STNGUIDE' ENTERED AT 16:43:45 ON 03 JUL 2007  
  
 FILE 'HCAPLUS' ENTERED AT 16:44:17 ON 03 JUL 2007  
 L15 0 S L14 AND L10  
 L16 0 S L8 AND L10  
  
 FILE 'STNGUIDE' ENTERED AT 16:44:19 ON 03 JUL 2007  
  
 FILE 'HCAPLUS' ENTERED AT 16:44:48 ON 03 JUL 2007  
 L17 57 S L8 AND L11 AND L12  
 FILE 'HCAPLUS' ENTERED AT 16:45:49 ON 03 JUL 2007  
 L18 37 S L17 AND (AY<2003 OR PY<2003 OR PRY<2003)  
 FILE 'STNGUIDE' ENTERED AT 16:48:59 ON 03 JUL 2007  
 L20 0 S L19 AND L12  
 L21 0 S L19 AND L12  
 FILE 'HCAPLUS' ENTERED AT 16:50:14 ON 03 JUL 2007  
 L22 2 S L19 AND L12  
 FILE 'HCAPLUS' ENTERED AT 17:05:07 ON 03 JUL 2007  
 L23 30590 S DENDRIMER OR GLUCOSAMINE  
 L24 8 S L14 AND L23

=> file registry  
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |
| 0.21       | 0.21    |

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:38:17 ON 03 JUL 2007  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 2 JUL 2007 HIGHEST RN 940883-34-1  
DICTIONARY FILE UPDATES: 2 JUL 2007 HIGHEST RN 940883-34-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

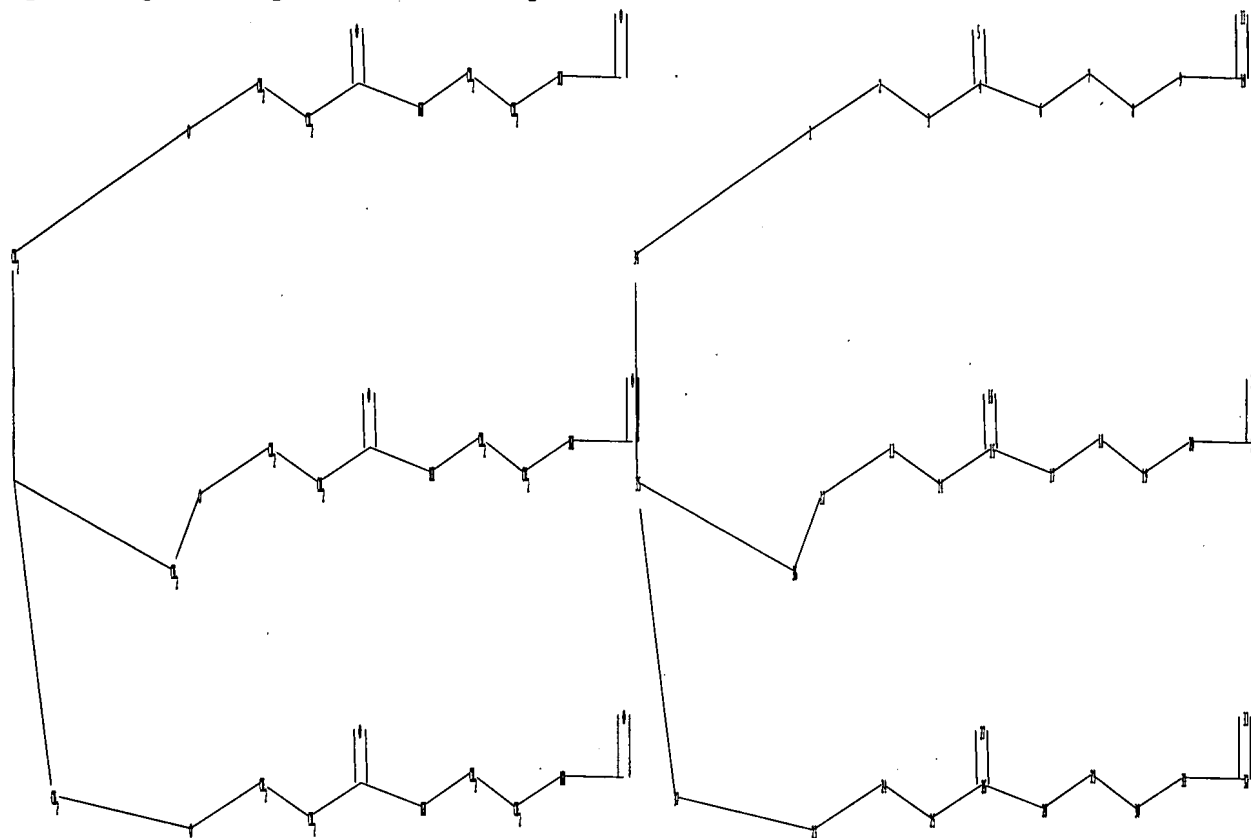
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10780447c.str



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23  
24 25 26 27 28 29 30 31 32 33 34 35 36 37

chain bonds :

1-2 1-34 2-3 3-4 4-5 4-6 6-7 7-8 8-9 9-10 10-11 12-13 12-36 13-14  
14-15  
15-16 15-17 17-18 18-19 19-20 20-21 21-22 23-24 23-37 24-25 25-26 26-27  
26-28 28-29  
29-30 30-31 31-32 32-33 34-35 35-36 35-37

exact/norm bonds :

4-5 4-6 9-10 10-11 15-16 15-17 20-21 21-22 26-27 26-28 31-32 32-33

exact bonds :

1-2 1-34 2-3 3-4 6-7 7-8 8-9 12-13 12-36 13-14 14-15 17-18 18-19 19-20  
23-24 23-37 24-25 25-26 28-29 29-30 30-31 34-35 35-36 35-37

G1:H

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS  
18:CLASS 19:CLASS  
20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS  
28:CLASS 29:CLASS  
30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

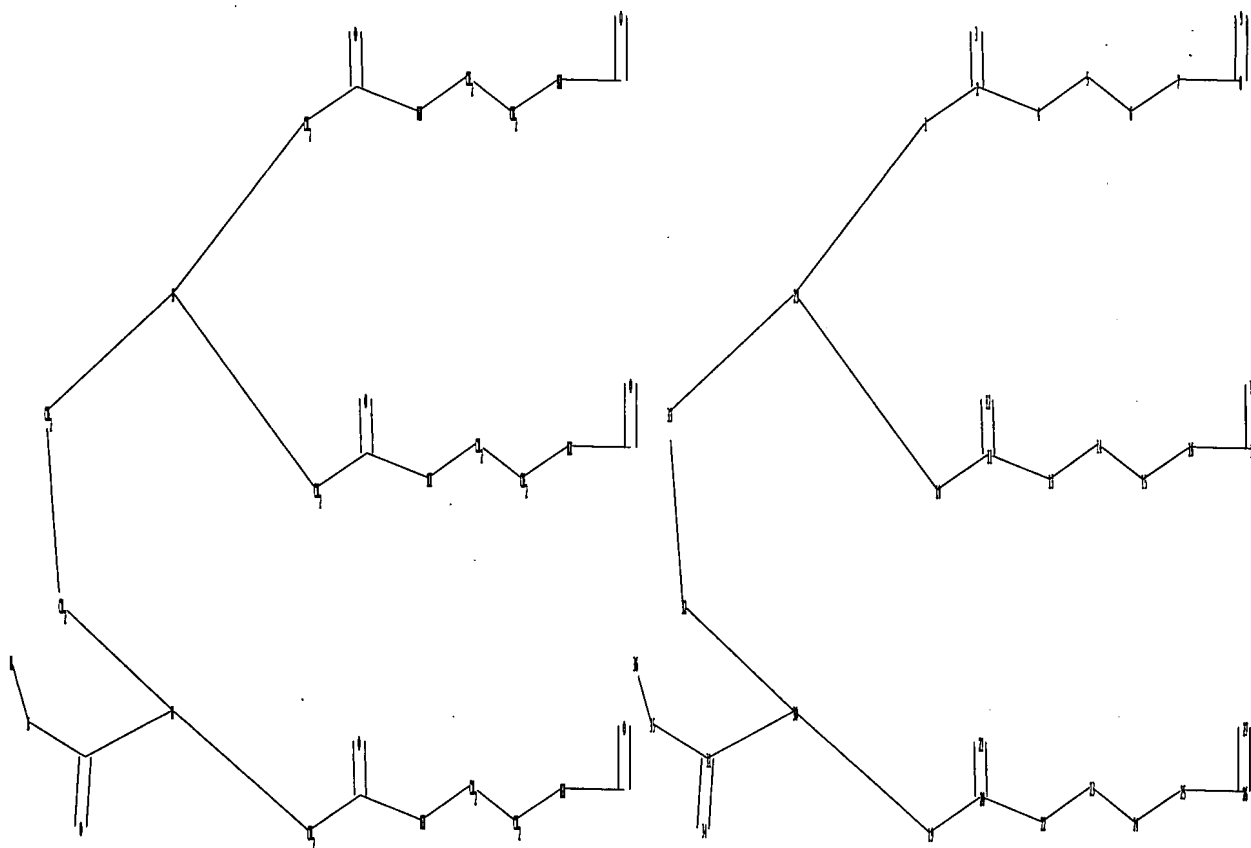
L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=>

Uploading C:\Program Files\Stnexp\Queries\10780447d.str



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23  
24 25 26 27 29 30 31 32 33 34 35 36

chain bonds :

1-2 1-29 2-3 2-4 4-5 5-6 6-7 7-8 8-9 10-11 10-29 11-12 11-13 13-14  
14-15 15-16 16-17 17-18 19-20 19-30 20-21 20-22 22-23 23-24 24-25 25-26  
26-27 29-33 30-31  
30-32 31-34 31-35 32-33 35-36

exact/norm bonds :

2-3 2-4 7-8 8-9 11-12 11-13 16-17 17-18 20-21 20-22 25-26 26-27 30-31  
31-34 31-35

exact bonds :

1-2 1-29 4-5 5-6 6-7 10-11 10-29 13-14 14-15 15-16 19-20 19-30 22-23  
23-24 24-25 29-33 30-32 32-33 35-36

G1:H

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS  
18:CLASS 19:CLASS  
20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS  
29:CLASS 30:CLASS  
31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS

=> d 12  
L2 HAS NO ANSWERS  
L2 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 11  
SAMPLE SEARCH INITIATED 16:38:59 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 865 TO ITERATE

100.0% PROCESSED 865 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 15536 TO 19064  
PROJECTED ANSWERS: 0 TO 0

L3 0 SEA SSS SAM L1

=> s 12  
SAMPLE SEARCH INITIATED 16:39:03 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 33 TO ITERATE

100.0% PROCESSED 33 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 316 TO 1004  
PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L2

=> s 11 sss full  
FULL SEARCH INITIATED 16:39:35 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17294 TO ITERATE

100.0% PROCESSED 17294 ITERATIONS 9 ANSWERS  
SEARCH TIME: 00.00.01

L5 9 SEA SSS FUL L1

=> s 12 sss full  
FULL SEARCH INITIATED 16:39:43 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 660 TO ITERATE

100.0% PROCESSED 660 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

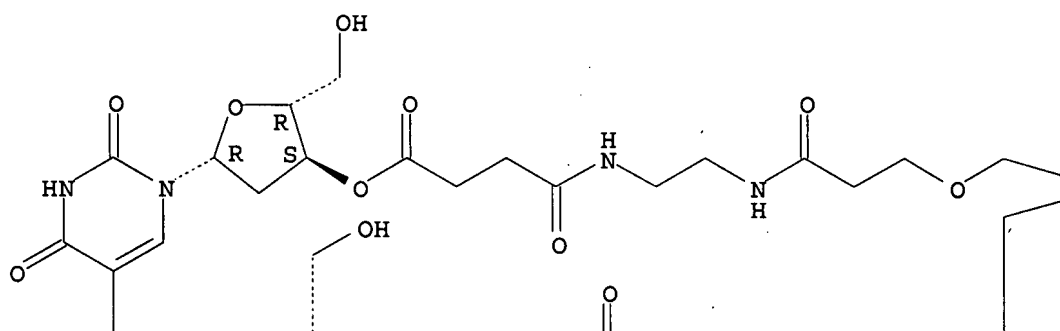
L6 0 SEA SSS FUL L2

=> d 15 scan

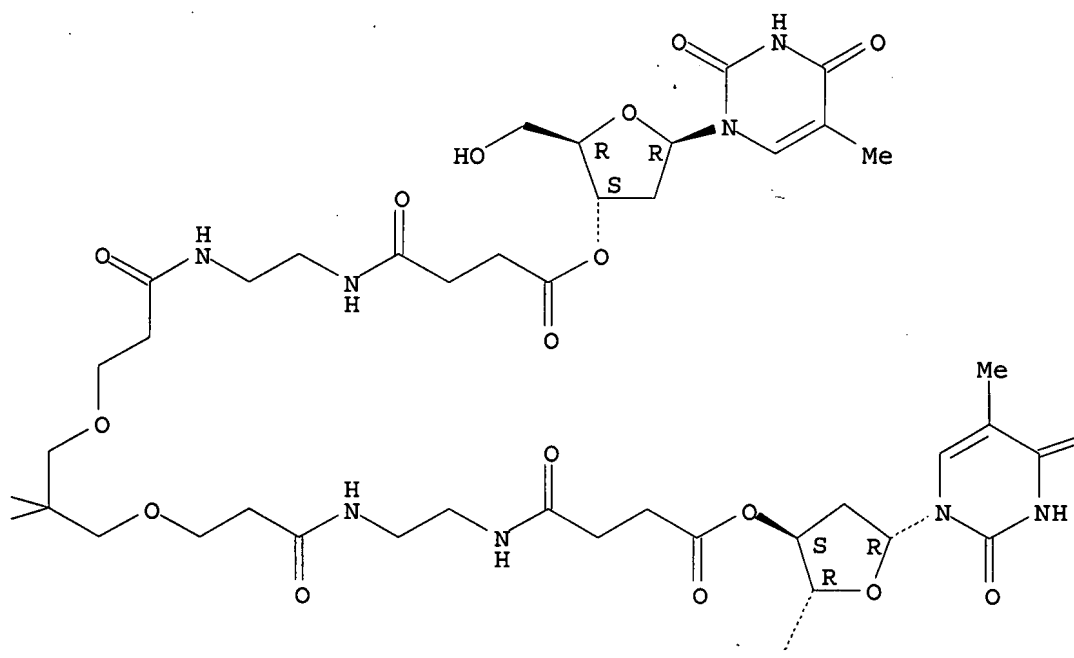
L5 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Thymidine, 3',3'''-[14,14-[[3-[[2-[(3-carboxy-1-oxopropyl)amino]ethyl]amino]-3-oxopropoxy]methyl]-4,9,19,24-tetraoxo-12,16-dioxo-5,8,20,23-tetraazaheptacosanedioate], 3',3'''-diester with thymidine (9CI)  
MF C81 H116 N16 O36

Absolute stereochemistry.

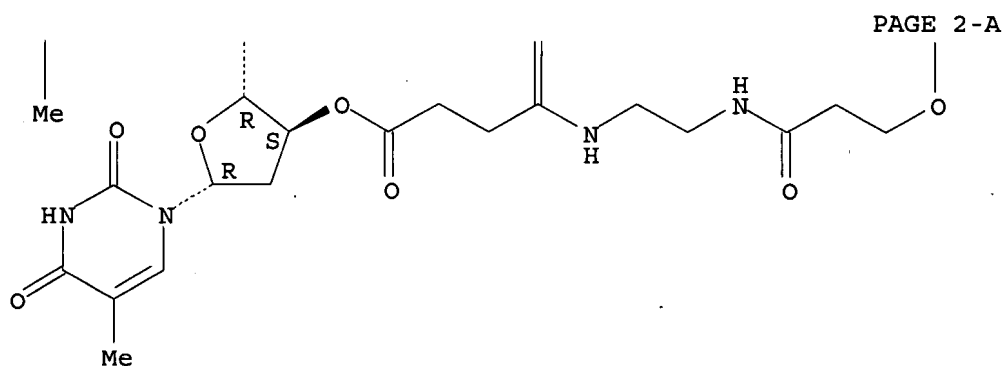
PAGE 1-A



PAGE 1-B



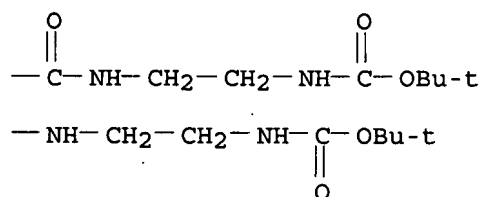
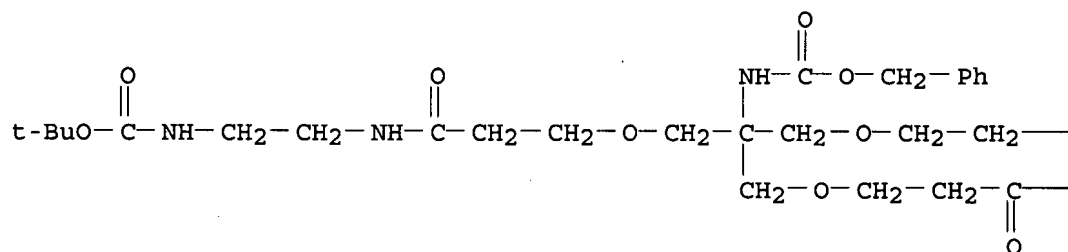
=O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

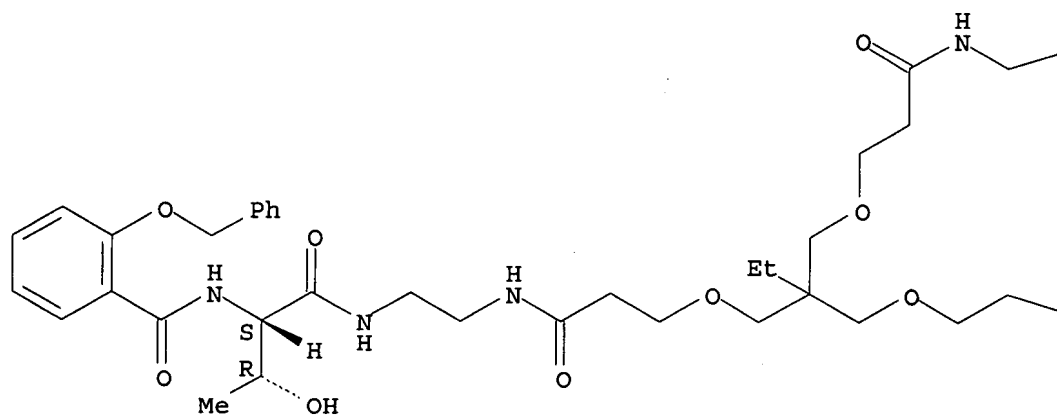
L5 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 9,13-Dioxo-2,5,17,20-tetraazaheneicosanedioic acid, 11-(12,12-dimethyl-  
 5,10-dioxo-2,11-dioxo-6,9-diazatridec-1-yl)-6,16-dioxo-11-  
 [[(phenylmethoxy)carbonyl]amino]-, bis(1,1-dimethylethyl) ester (9CI)  
 MF C42 H71 N7 O14

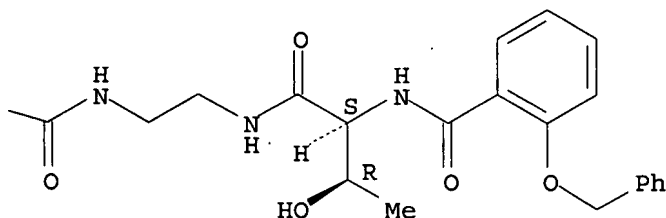
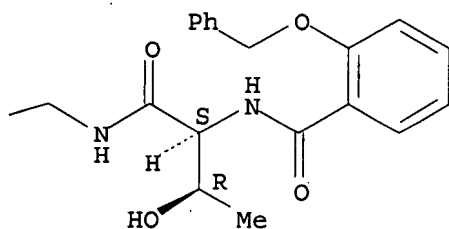


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 4,8-Dioxa-12,15,18-triazanonadecanamide, 6-ethyl-17-[(1R)-1-hydroxyethyl]-  
 6-[(11S)-11-[(1R)-1-hydroxyethyl]-5,10,13-trioxo-2-oxa-6,9,12-triazatridec-  
 1-yl]-N-[2-[[[(2S,3R)-3-hydroxy-1-oxo-2-[[2-(phenylmethoxy)benzoyl]amino]bu-  
 tyl]amino]ethyl]-11,16,19-trioxo-19-[2-(phenylmethoxy)phenyl]-, (17S)-  
 MF C75 H95 N9 O18

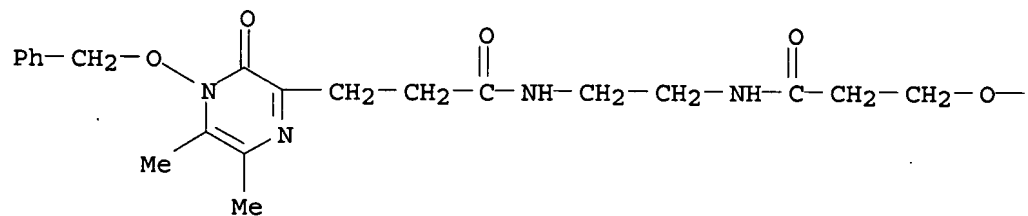
Absoluté stereochemistry.

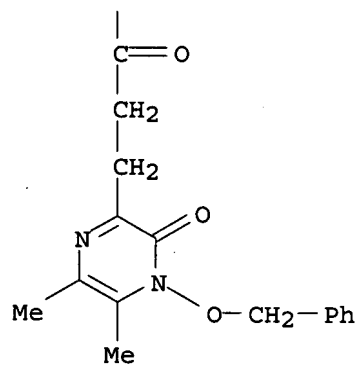
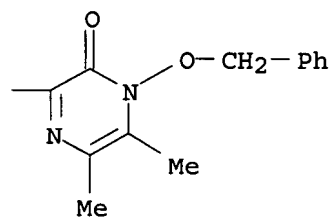
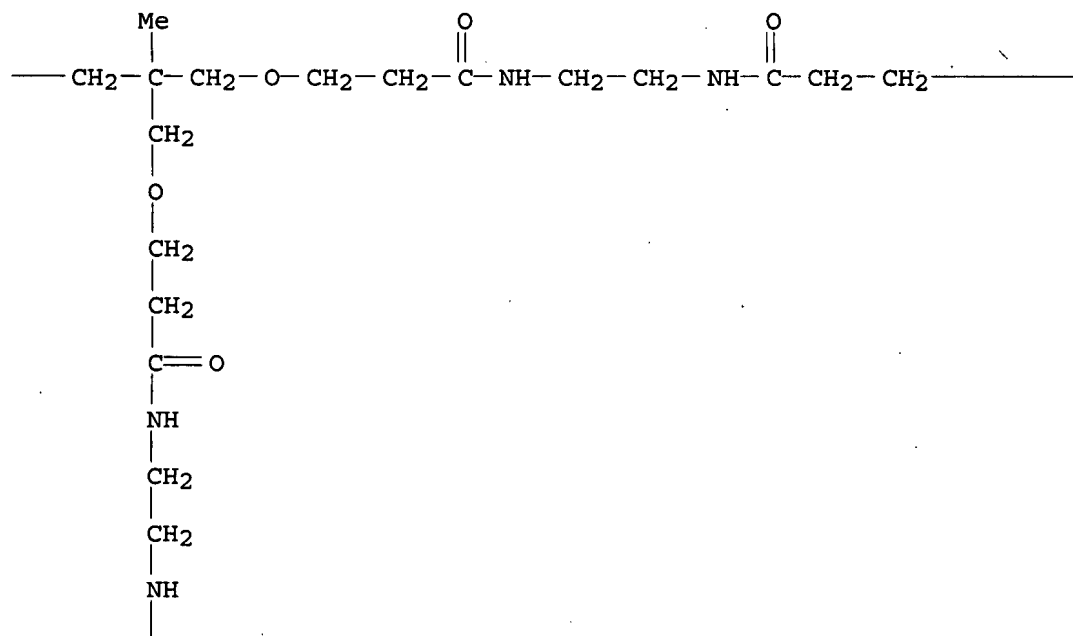




\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Pyrazinepropanamide, N,N'-[9-[[[3-[[2-[[3-[3,4-dihydro-5,6-dimethyl-3-oxo-4-(phenylmethoxy)pyrazinyl]-1-oxopropyl]amino]ethyl]amino]-3-oxopropoxy]methyl]-9-methyl-4,14-dioxo-7,11-dioxo-3,15-diazaheptadecane-1,17-diyl]bis[3,4-dihydro-5,6-dimethyl-3-oxo-4-(phenylmethoxy)- (9CI)  
 MF C68 H90 N12 O15

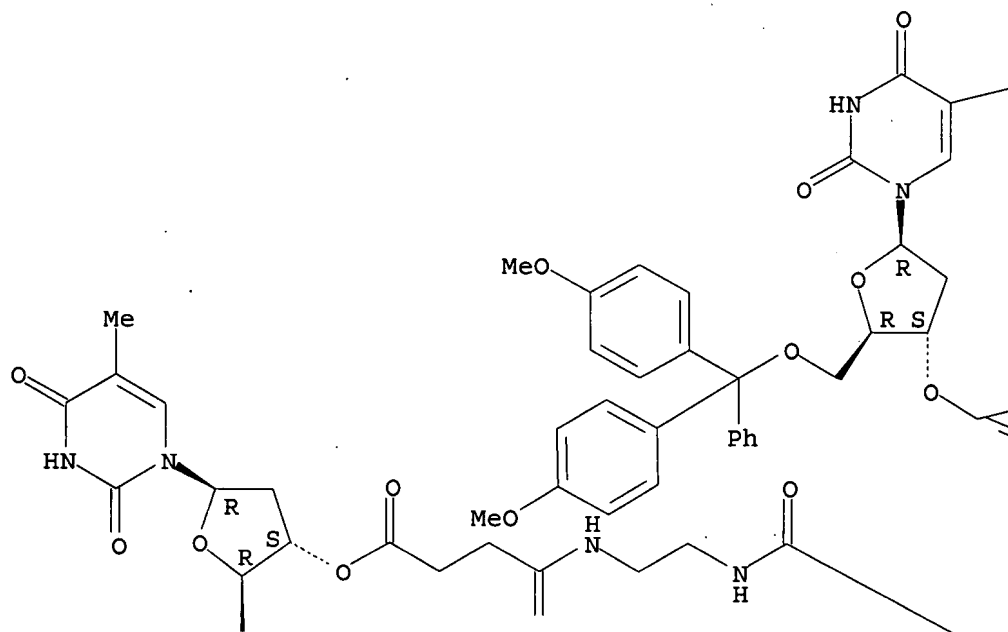




L5 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Thymidine, 5'-O- [bis(4-methoxyphenyl)phenylmethyl]-, 3',3'''-[14,14-[[3-  
 [[2-[(3-carboxy-1-oxopropyl)amino]ethyl]amino]-3-oxopropoxy]methyl]-  
 4,9,19,24-tetraoxo-12,16-dioxo-5,8,20,23-tetraazaheptacosanedioate],  
 3',3'''-diester with 5'-O- [bis(4-methoxyphenyl)phenylmethyl]thymidine  
 (9CI)  
 MF C165 H188 N16 O44

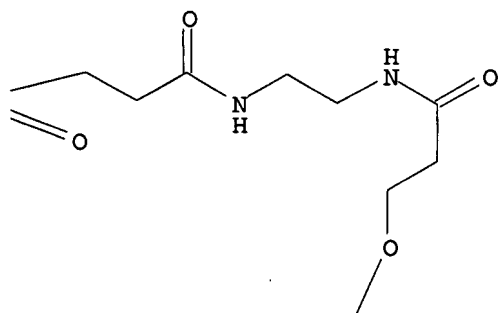
Absolute stereochemistry.

PAGE 1-A



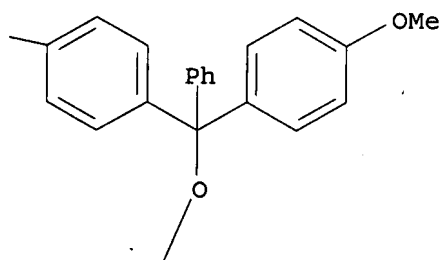
PAGE 1-B

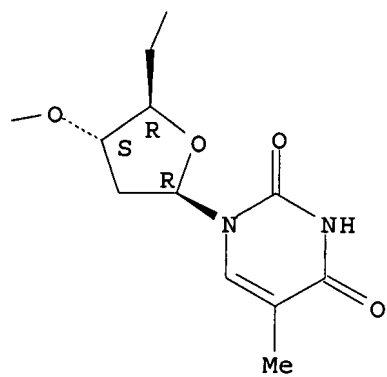
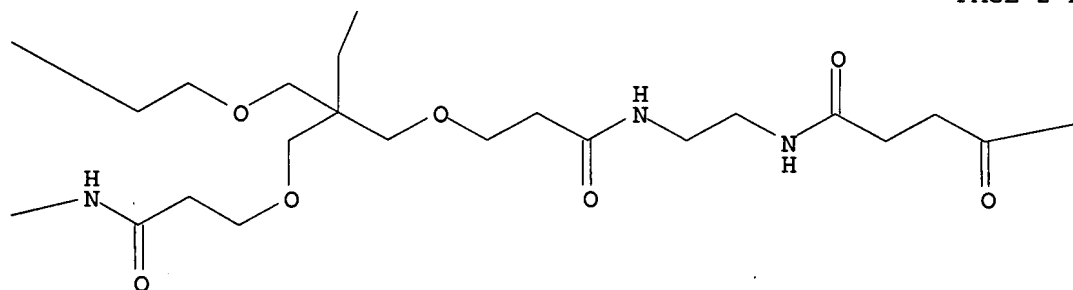
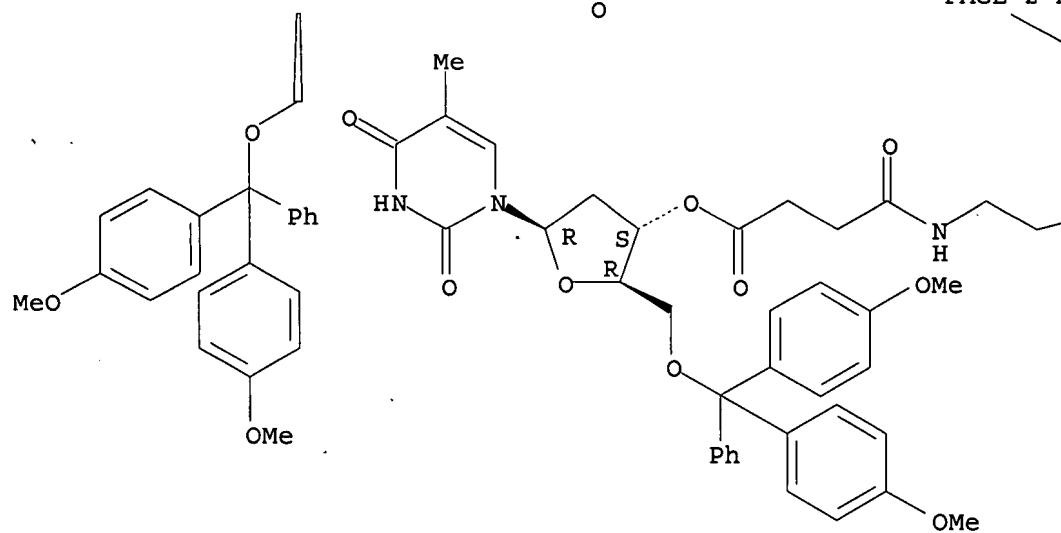
— Me



MeO—

PAGE 1-C





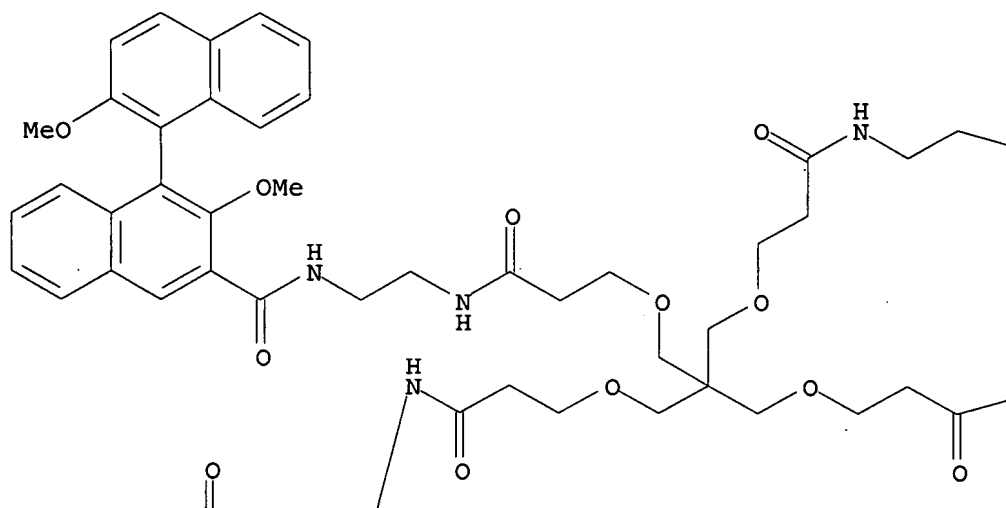
**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

L5 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN [1,1'-Binaphthalene]-3-carboxamide, N,N'-[9,9-bis[[3-[[2-[[[(1S)-2,2'-

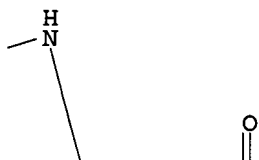
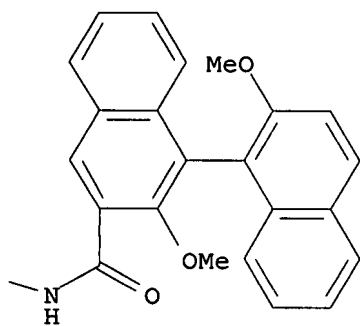
dimethoxy[1,1'-binaphthalen]-3-yl]carbonyl]amino]ethyl]amino]-3-oxopropoxy]methyl]-4,14-dioxo-7,11-dioxa-3,15-diazaheptadecane-1,17-diyl]bis[2,2'-dimethoxy-, (1S,1''S)- (9CI)

MF C117 H116 N8 O20

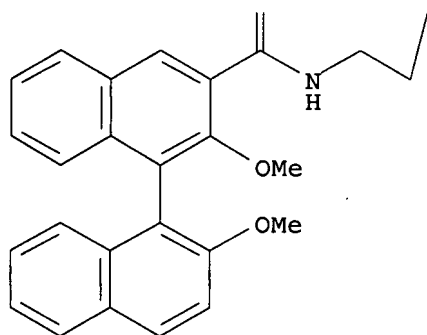
PAGE 1-A



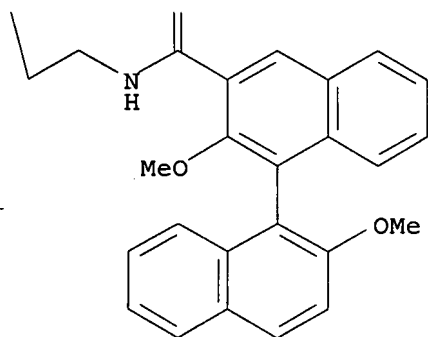
PAGE 1-B



PAGE 2-A



PAGE 2-B



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

344.65

344.86

FILE 'STNGUIDE' ENTERED AT 16:40:05 ON 03 JUL 2007

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jun 29, 2007 (20070629/UP).

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.18

345.04

FILE 'HCAPLUS' ENTERED AT 16:41:47 ON 03 JUL 2007

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FILE COVERS 1907 - 3 Jul 2007 VOL 147 ISS 2  
FILE LAST UPDATED: 2 Jul 2007 (20070702/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l5

L7 7 L5

=> s (nucleic(w)acid or DNA or RNA)

199653 NUCLEIC  
4395712 ACID  
149730 NUCLEIC(W)ACID  
837825 DNA  
330432 RNA

L8 1088933 (NUCLEIC(W)ACID OR DNA OR RNA)

=> s (short(w)interfering(w)RNA) or siRNA

516077 SHORT  
47211 INTERFERING  
330432 RNA  
972 SHORT(W)INTERFERING(W)RNA  
8386 SIRNA

L9 8739 (SHORT(W)INTERFERING(W)RNA) OR SIRNA

=> s (cluster(w)glycoside)

187839 CLUSTER  
37459 GLYCOSIDE

L10 30 (CLUSTER(W)GLYCOSIDE)

=> s glucosamine

L11 22056 GLUCOSAMINE

=> s endocytosis or (drug(w)delivery)

17567 ENDOCYTOSIS  
739612 DRUG  
277587 DELIVERY  
200049 DRUG(W)DELIVERY

L12 216523 ENDOCYTOSIS OR (DRUG(W)DELIVERY)

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.60

347.64

FILE 'STNGUIDE' ENTERED AT 16:42:36 ON 03 JUL 2007  
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LAST RELOADED: Jun 29, 2007 (20070629/UP).

=> file hcaplus  
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |
| 0.12       | 347.76  |

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 16:43:43 ON 03 JUL 2007  
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FILE COVERS 1907 - 3 Jul 2007 VOL 147 ISS 2  
FILE LAST UPDATED: 2 Jul 2007 (20070702/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l8 and l10 and l11

L13 0 L8 AND L10 AND L11

=> s l9 and l12

L14 702 L9 AND L12

=> file stnguide

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |
| 2.60       | 350.36  |

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 16:43:45 ON 03 JUL 2007  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Jun 29, 2007 (20070629/UP).

=> file hcaplus  
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |
| 0.06       | 350.42  |

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 16:44:17 ON 03 JUL 2007

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FILE COVERS 1907 - 3 Jul 2007 VOL 147 ISS 2  
FILE LAST UPDATED: 2 Jul 2007 (20070702/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l14 and l10

L15 0 L14 AND L10

=> s l8 and l10

L16 0 L8 AND L10

=> file stnguide

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST  | 2.60             | 353.02        |

FILE 'STNGUIDE' ENTERED AT 16:44:19 ON 03 JUL 2007  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Jun 29, 2007 (20070629/UP).

=> file hcaplus

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST  | 0.06             | 353.08        |

FILE 'HCAPLUS' ENTERED AT 16:44:48 ON 03 JUL 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE LAST UPDATED: 2 Jul 2007 (20070702/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> s l8 and l11 and l12

L17 57 L8 AND L11 AND L12

=> file stnguide

| COST IN U.S. DOLLARS | SINCE FILE<br>ENTRY | TOTAL<br>SESSION |
|----------------------|---------------------|------------------|
| FULL ESTIMATED COST  | 2.60                | 355.68           |

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| COST IN U.S. DOLLARS | SINCE FILE<br>ENTRY | TOTAL<br>SESSION |
|----------------------|---------------------|------------------|
| FULL ESTIMATED COST  | 0.06                | 355.74           |

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FILE LAST UPDATED: 2 Jul 2007 (20070702/ED)

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UNMATCHED LEFT PARENTHESIS 'AND (AY<2003'

The number of right parentheses in a query must be equal to the  
number of left parentheses.

=> file stnguide

| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
|----------------------|------------|-------|
|----------------------|------------|-------|

|                     | ENTRY | SESSION |
|---------------------|-------|---------|
| FULL ESTIMATED COST | 2.60  | 358.34  |

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|                     | SINCE FILE | TOTAL   |
|---------------------|------------|---------|
|                     | ENTRY      | SESSION |
| FULL ESTIMATED COST | 0.06       | 358.40  |

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FILE COVERS 1907 - 3 Jul 2007 VOL 147 ISS 2  
FILE LAST UPDATED: 2 Jul 2007 (20070702/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l17 and (AY<2003 or PY<2003 or PRY<2003)

4447329 AY<2003  
22885736 PY<2003  
3925765 PRY<2003

L18 37 L17 AND (AY<2003 OR PY<2003 OR PRY<2003)

=> file stnguide

|                     | SINCE FILE | TOTAL   |
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|                     | ENTRY      | SESSION |
| FULL ESTIMATED COST | 2.60       | 361.00  |

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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Jun 29, 2007 (20070629/UP).

=> d l18 1-37 ti  
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L18 ANSWER 1 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Topical compositions comprising glycosaminoglycan (GAG)-peptide complexes for the treatment, protection and restoration of skin and connective tissues

L18 ANSWER 2 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Ion-pair delivery system for cosmetic and pharmaceutical compositions

L18 ANSWER 3 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Anti-CD22 antibodies conjugated with cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia

L18 ANSWER 4 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Pasteurella glycosaminoglycan synthases and method for preparing monodisperse glycosaminoglycans for medical use

L18 ANSWER 5 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Polysaccharide over-producing Staphylococci with modified icaR gene and ica regulatory element, and methods for treating staphylococcal infections

L18 ANSWER 6 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Pasteurella multocida glycosaminoglycan transferases and their use for polysaccharide synthesis and polymer grafting

L18 ANSWER 7 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Transdermal compositions containing tertiary amides and ion pairs of quaternary ammonium salts and fatty acids

L18 ANSWER 8 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Expression of EPS operon in lactic acid bacteria (Streptococcus macedonicus) produces a polysaccharide for use in infant food products

L18 ANSWER 9 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Composition for cytocompatible, injectable, self-gelling chitosan solutions for encapsulating and delivering live cells or biologically active factors

L18 ANSWER 10 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Production of hexosamines in transgenic plants

L18 ANSWER 11 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Chimeric vaccines comprising stabilized HBcAg and B and/or T cell epitopes for treating chronic hepatitis B

L18 ANSWER 12 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Antimicrobial sulfated polysaccharides that exhibit resistance to lysosomal degradation during kidney filtration and renal passage, compositions, and methods of use

L18 ANSWER 13 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Leishmania antigens for use in the therapy and diagnosis of leishmaniasis

L18 ANSWER 14 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Skin compositions containing fatty acids and quaternary ammonium surfactants

L18 ANSWER 15 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI HSV antigens, polynucleotides and antibodies for diagnosis and treatment of herpes simplex virus infection

L18 ANSWER 16 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Oral dosage form comprising a therapeutic agent and an adverse-effect agent

L18 ANSWER 17 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Compositions and methods for inhibiting human immunodeficiency virus infection by down-regulating human cellular genes, and inhibitor identification methods

L18 ANSWER 18 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Methods and proteoglycans-inducing compositions for the treatment and prevention of smooth muscle cell proliferation

L18 ANSWER 19 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Polymer grafting with polysaccharide synthases for coating biomaterial surfaces

L18 ANSWER 20 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Nucleic acid delivery formulations

L18 ANSWER 21 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Human glucosamine-6-phosphate deaminase and cDNAs and drug screening targeted to its regulation and other therapeutic application for related diseases

L18 ANSWER 22 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Petunia hybrida gene Shooting encoding cytokinin biosynthesis enzyme tRNA-IPT and uses in plant growth regulation and cosmetic preparations

L18 ANSWER 23 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Biodegradable mixed polymeric micelles for drug delivery

L18 ANSWER 24 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Development of a Nonviral Gene Delivery Vehicle for Systemic Application

L18 ANSWER 25 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Clear oil-containing pharmaceutical compositions containing a therapeutic agent

L18 ANSWER 26 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Methods and compositions and systems for determining gene function

L18 ANSWER 27 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Compositions and methods for the diagnosis and treatment of herpes simplex virus infection

L18 ANSWER 28 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Human glucosamine-6-phosphate isomerase 12 and its cDNA and use thereof

L18 ANSWER 29 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Glucosamine and egg for reducing inflammation

L18 ANSWER 30 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Polydisaccharides for regulating hematopoietic differentiation for treatment of leukemia

L18 ANSWER 31 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Procedure for changing the electrical properties of human ocular mucus and providing substitutes for ophthalmic use

L18 ANSWER 32 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Topical compositions containing lecithins and moisturizers for the treatment skin disorders

L18 ANSWER 33 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Biodegradable mixed polymeric micelles for gene delivery

L18 ANSWER 34 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Hydrophobic glycosylamine derivatives, compositions, and methods for their use

L18 ANSWER 35 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Topical compositions containing lignan glycosides and sequestering agents

L18 ANSWER 36 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Topical compositions containing lignan glycosides and sequestering agents

L18 ANSWER 37 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Compositions and methods for targeting gene delivery vehicles using targeting elements covalently bound to gene delivery vehicles through linking agents

=> d 118 20 23 24 ti abs bib  
 YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L18 ANSWER 20 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Nucleic acid delivery formulations  
 AB The invention is based on the discovery that injectable and nucleic acid-compatible polymeric compns. and formulations can be structurally designed to regulate nucleic acid activity or gene expression in vivo, for example, by controlling the bioavailability of the nucleic acid via modulation of the biodegradability and crosslink d. of the network formed by the components of the formulation. The polymeric network encases the nucleic acid, not only controlling the release of the DNA, but also providing protection from degradation. The invention described herein improves upon prior modes of gene delivery, in that gene expression can be regulated by modulation of a polymeric network formed by combination of at least two water-soluble components capable of reacting with one another. The nucleic acid of interest is incorporated into the network to be released in a sustained manner to achieve level and duration of activity or expression needed.

AN 2002:555628 HCAPLUS <<LOGINID::20070703>>  
 DN 137:114498  
 TI Nucleic acid delivery formulations  
 IN Barman, Shikha P.; Roy, Krishnendu; Hedley, Mary Lynne; Wang, Daqing  
 PA Zycos Inc., USA  
 SO PCT Int. Appl., 92 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

|    | PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE         |
|----|---------------|--|----------|-----------------|--------------|
| PI | WO 2002057424 | A2   | 20020725 | WO 2002-US1379  | 20020117 <-- |
|    | WO 2002057424 | A3   | 20021003 |                 |              |
|    | W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW |          |                 |              |
|    | RW:           | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |              |
|    | CA 2435287    | A1   | 20020725 | CA 2002-2435287 | 20020117 <-- |
|    | AU 2002245279 | A1   | 20020730 | AU 2002-245279  | 20020117 <-- |
|    | EP 1352072    | A2   | 20031015 | EP 2002-713428  | 20020117 <-- |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004521109 T 20040715 JP 2002-558478 20020117 <--  
US 2004147466 A1 20040729 US 2004-466289 20040315 <--  
PRAI US 2001-262219P P 20010117 <--  
US 2001-270256P P 20010220 <--  
US 2001-300484P P 20010622 <--  
WO 2002-US1379 W 20020117 <--

L18 ANSWER 23 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Biodegradable mixed polymeric micelles for drug delivery

AB A biodegradable carrier for delivery of a selected bioactive mol. into a targeted host cell contains an amphiphilic polyester-polycation copolymer and an amphiphilic polyester-sugar copolymer. The carrier is particularly useful for delivery of a neg. charged bioactive mol. such as a nucleic acid. The invention improves delivery efficiency by providing a particulate gene carrier for which the particle size and charge d. are easily controlled by various means. Various kinds of ligands and other functional compds. may be also be introduced to the carrier. The carrier may be used for delivering a targeted host cell with a bioactive mol. For example, preparation of a mixed polymeric micelles from poly(L-lactic acid)-poly(L-lysine) graft copolymer and poly(L-lactic acid)-poly(N-lactosyl-L-lysine) graft copolymer was described. Transfection efficiency of mixed polymeric micelles prepared was as good as Lipofectin reagent in HepG2 cells in vitro in the absence of serum.

AN 2002:391472 HCAPLUS <<LOGINID::20070703>>

DN 136:406854

TI Biodegradable mixed polymeric micelles for drug delivery

IN Choi, Young Kweon; Kim, Jin Seok

PA Expression Genetics, Inc., USA

SO PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

|      | PATENT NO.      | KIND   | DATE     | APPLICATION NO. | DATE         |
|------|-----------------|--|----------|-----------------|--------------|
| PI   | WO 2002039955   | A2   | 20020523 | WO 2001-US43911 | 20011116 <-- |
|      | WO 2002039955   | A3   | 20030116 |                 |              |
|      | W:              | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW |          |                 |              |
|      | RW:             | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |              |
|      | US 6410057      | B1   | 20020625 | US 2000-713904  | 20001116 <-- |
|      | AU 2002039324   | A5   | 20020527 | AU 2002-39324   | 20011116 <-- |
| PRAI | US 2000-713904  | A  | 20001116 | <--             |              |
|      | US 1997-69551P  | P  | 19971212 | <--             |              |
|      | US 1998-209631  | A2   | 19981211 | <--             |              |
|      | WO 2001-US43911 | W  | 20011116 | <--             |              |

L18 ANSWER 24 OF 37 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Development of a Nonviral Gene Delivery Vehicle for Systemic Application

AB Polycation vehicles used for in vitro gene delivery require alteration for successful application in vivo. Modification of polycations by direct grafting of addnl. components, e.g., PEG, either before or after DNA complexation, tend to interfere with polymer/DNA binding interactions; this is a particular problem for short polycations such as linear,  $\beta$ -cyclodextrin-containing polycations (BCDPs). Here, a new method of BCDP polyplex (polycation/ DNA

composite structures) modification is presented that exploits the ability to form inclusion complexes between cyclodextrins and adamantane. Surface-PEGylated  $\beta$ CDP polyplexes are formed by self-assembly of the polyplexes with adamantane-PEG conjugates. While unmodified polyplexes rapidly aggregate and precipitate in salt solns., the PEGylated  $\beta$ CDP polyplexes are stable at conditions of physiol. salt concentration. Addition of targeting ligands to the adamantane-PEG conjugates allows for receptor-mediated delivery; galactosylated  $\beta$ CDP-based particles reveal selective targeting to hepatocytes via the asialoglycoprotein receptor. Galactosylated particles transfect hepatoma cells with 10-fold higher efficiency than glucosylated particles (control), but show no preferential transfection in a cell line lacking the asialoglycoprotein receptor. Thus, surface modification of  $\beta$ CDP-based polyplexes through the use of cyclodextrin/adamantane host/guest interactions endows the particles with properties appropriate for systemic application.

AN 2002:294332 HCAPLUS <<LOGINID::20070703>>  
 DN 137:52241  
 TI Development of a Nonviral Gene Delivery Vehicle for Systemic Application  
 AU Pun, Suzie Hwang; Davis, Mark E.  
 CS Chemical Engineering, California Institute of Technology, Pasadena, CA, 91125, USA  
 SO Bioconjugate Chemistry (2002), 13(3), 630-639  
 CODEN: BCCHE; ISSN: 1043-1802  
 PB American Chemical Society  
 DT Journal  
 LA English  
 RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file hcaplus

|  |                  |               |
|--|------------------|---------------|
| COST IN U.S. DOLLARS                       | SINCE FILE ENTRY | TOTAL SESSION |
| FULL ESTIMATED COST                        | 0.12             | 387.63        |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE                        | 0.00             | -2.34         |

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=> s 110 and (PY<2003 or AY<2003 or PRY<2003)

22885736 PY<2003  
4447329 AY<2003  
3925765 PRY<2003

L19 22 L10 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file stnguide

|  |            |         |
|--|------------|---------|
| COST IN U.S. DOLLARS                       | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| FULL ESTIMATED COST                        | 2.60       | 390.23  |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| CA SUBSCRIBER PRICE                        | 0.00       | -2.34   |

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=> d l19 1-22 ti

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L19 ANSWER 1 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Sweet viruses: Artificial carbohydrate-decorated virus particles

L19 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI The Cluster Glycoside Effect

L19 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Determination of the upper size limit for uptake and processing of ligands by the asialoglycoprotein receptor on hepatocytes in vitro and in vivo

L19 ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI On the meaning of affinity: cluster glycoside effects and concanavalin A

L19 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Facile solid-phase synthesis of YEE(ah-GalNAc)3, a ligand with known high affinity for the asialoglycoprotein receptor

L19 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Clustering of mannose ligands using carbohydrates as multivalent cores.

L19 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Multivalency as a strategy for carbohydrate-based ligands: the molecular basis of the cluster glycoside effect

L19 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI A comparison of biological and calorimetric analyses of multivalent glycodendrimer ligands for concanavalin A

L19 ANSWER 9 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Carbohydrates tagged with the CCo3(CO)9 cluster

L19 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI On the Meaning of Affinity: Cluster Glycoside Effects and Concanavalin A

L19 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Convergent synthesis of fluorescein-labeled lysine-based cluster glycosides

L19 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Cluster glycoside utilized by dendrimer

L19 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Synthetic carbohydrate dendrimers. Synthetic carbohydrate-containing dendrimers

L19 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Facile Synthesis of a High-Affinity Ligand for Mammalian Hepatic Lectin Containing Three Terminal N-Acetylgalactosamine Residues

L19 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Triantennary cluster glycosides, their preparation and their use in treatment of hyperlipidemia.

L19 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Stepwise synthesis of a GalNAc-containing cluster glycoside ligand of the asialoglycoprotein receptor

L19 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Observation of Unique Cross-Linked Lattices Between Multiantennary Carbohydrates and Soybean Lectin. Presence of Pseudo-2-fold Axes of Symmetry in Complex Type Carbohydrates

L19 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Binding and precipitating activities of Erythrina lectins with complex type carbohydrates and synthetic cluster glycosides. A comparative study of the lectins from *E. corallodendron*, *E. cristagalli*, *E. flabelliformis*, and *E. indica*

L19 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Binding and precipitation of lectins from *Erythrina indica* and *Ricinus communis* (Agglutinin I) with synthetic cluster glycosides

L19 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Cluster glycosides

L19 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Synthesis of aryl cluster glycosides by cyclotrimerization of 2-propynyl carbohydrate derivatives

L19 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Binding and endocytosis of cluster glycosides by rabbit hepatocytes. Evidence for a short-circuit pathway that does not lead to degradation

=> s l19 and l12file hcaplus  
 '2003' NOT A VALID FIELD CODE  
 '2003' NOT A VALID FIELD CODE  
 '2003' NOT A VALID FIELD CODE  
 23 CLUSTER  
 0 GLYCOSIDE  
 0 (CLUSTER(W) GLYCOSIDE)  
 0 PY<2003  
 0 AY<2003  
 0 PRY<2003  
 0 L12FILE  
 1 HCAPLUS  
 0 L12FILE HCAPLUS  
 (L12FILE(W) HCAPLUS)

L20 0 L19 AND L12FILE HCAPLUS

=> s l19 and l12

'2003' NOT A VALID FIELD CODE  
'2003' NOT A VALID FIELD CODE  
'2003' NOT A VALID FIELD CODE

23 CLUSTER  
0 GLYCOSIDE  
0 (CLUSTER(W) GLYCOSIDE)  
0 PY<2003  
0 AY<2003  
0 PRY<2003  
0 ENDOCYTOSIS  
36 DRUG  
6 DELIVERY  
2 DRUG(W) DELIVERY

L21 0 L19 AND L12

=> d l7 1-7 ti abs bib

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YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:n

=> file hcaplus

|  |            |         |
|--|------------|---------|
| COST IN U.S. DOLLARS                       | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| FULL ESTIMATED COST                        | 0.12       | 400.49  |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| CA SUBSCRIBER PRICE                        | 0.00       | -2.34   |

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FILE LAST UPDATED: 2 Jul 2007 (20070702/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l19 and l12

L22 2 L19 AND L12

=> d 17 1-7 ti abs bib

L7 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Toward Iron Sensors: Bioinspired Tripods Based on Fluorescent Phenol-oxazoline Coordination Sites  
AB In the quest for fast throughput metal biosensors, it would be of interest to prepare fluorophoric ligands with surface-adhesive moieties. Biomimetic analogs to microbial siderophores possessing such ligands offer attractive model compds. and new opportunities to meet this challenge. The design, synthesis, and physicochem. characterization of biomimetic analogs of microbial siderophores from *Paracoccus denitrificans* and from the *Vibrio* genus are described. The (4S,5S)-2-(2-hydroxyphenyl)-5-methyl-4,5-dihydro-1,3-oxazole-4-carbonyl group (La), noted here as an HPO unit, was selected for its potential dual properties, serving as a selective iron(III) binder and simultaneously as a fluorophore. Three tripodal sym. analogs cis-Lb, cis-Lc, and trans-Lc, which mainly differ in the length of the spacers between the central carbon anchor and the ligating sites, were synthesized. These ferric-carriers were built from a tetrahedral carbon as an anchor, sym. extended by three converging iron-binding chains, each bearing a terminal HPO. The fourth chain could contain a surface-adhesive function (Lc). A combination of absorption and emission spectrophotometry, potentiometry, electrospray mass spectrometry, and electrochem. was used to fully characterize the corresponding ferric complexes and to determine their stability. The quenching mechanism is consistent with an intramol. static process and is more efficient for the analog with longer arms. Detection limits in the low nanogram per mL range, comparable with the best chemosensors based on natural peptide siderophores, have been determined. These results clearly demonstrate that these tris(phenol-oxazoline) ligands in a tripodal arrangement firmly bind iron(III). Due to their fluorescent properties, the coordination event can be easily monitored, while the fourth arm is available for surface-adhesive moieties. The tripodal system is therefore an ideal candidate for integration with solid-state materials for the development of chip-based devices and anal. methodologies.  
AN 2007:216788 HCAPLUS <<LOGINID::20070703>>  
DN 146:457805  
TI Toward Iron Sensors: Bioinspired Tripods Based on Fluorescent Phenol-oxazoline Coordination Sites  
AU Kikkeri, Raghavendra; Traboulsi, Hassan; Humbert, Nicolas; Gumienna-Kontecka, Elzbieta; Arad-Yellin, Rina; Melman, Galina; Elhabiri, Mourad; Albrecht-Gary, Anne-Marie; Shanzer, Abraham  
CS Department of Organic Chemistry, The Weizmann Institute of Science, Rehovot, Israel  
SO Inorganic Chemistry (Washington, DC, United States) (2007), 46(7), 2485-2497  
CODEN: INOCAJ; ISSN: 0020-1669  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 136 THERE ARE 136 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Dendrimers as molecular translocators  
AB Transport mols. include a dendrimer and a biol. active mol. The dendrimer of such transport mols. includes at least one guanidine group, at least one protonated guanidine group, at least one protected guanidine group, at least one amidine group, at least one protonated amidine group, at least one protected amidine group, at least one ureido group, at least one protonated ureido group, at least one protected ureido group, at least one thiorureido group, at least one protonated thiorureido group, or at least one protected thiorureido group. The biol. active mol. is bonded to the dendrimer. A method of increasing the bioavailability of a drug includes

bonding the drug to a dendrimer of the invention.

AN 2004:80754 HCAPLUS <<LOGINID::20070703>>  
DN 140:146993  
TI Dendrimers as molecular translocators  
IN Goodman, Murray; Seong, Churl Min; Harms, Guido; Min, Changhee; Choi,  
Byung Hyune; Chung, Hyun-ho  
PA The Regents of the University of California, USA; Lg Life Sciences  
SO PCT Int. Appl., 192 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 2

|      | PATENT NO.      | KIND   | DATE     | APPLICATION NO. | DATE     |
|------|-----------------|--|----------|-----------------|----------|
| PI   | WO 2004009666   | A2   | 20040129 | WO 2003-US22772 | 20030718 |
|      | WO 2004009666   | A3   | 20040610 |                 |          |
|      | W:              | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |          |
|      | RW:             | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |
|      | AU 2003263793   | A1   | 20040209 | AU 2003-263793  | 20030718 |
| PRAI | US 2002-397319P | P  | 20020719 |                 |          |
|      | WO 2003-US22772 | W  | 20030718 |                 |          |

L7 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Dendrimers as molecular translocators  
AB Transport mols. include a dendrimer and a biol. active mol. The dendrimer of such transport mols. includes at least one guanidine group, at least one protonated guanidine group, at least one protected guanidine group, at least one amidine group, at least one protonated amidine group, at least one protected amidine group, at least one ureido group, at least one protonated ureido group, at least one protected ureido group, at least one thioureido group, at least one protonated thioureido group, or at least one protected thioureido group. The biol. active mol. is bonded to the dendrimer. A method of increasing the bioavailability of a drug includes bonding the drug to a dendrimer of the invention.

AN 2004:80753 HCAPLUS <<LOGINID::20070703>>  
DN 140:146992  
TI Dendrimers as molecular translocators  
IN Goodman, Murray; Seong, Churl Min; Harms, Guido  
PA The Regents of the University of California, USA  
SO PCT Int. Appl., 208 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 2

|    | PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
|----|---------------|--|----------|-----------------|----------|
| PI | WO 2004009665 | A2   | 20040129 | WO 2003-US22771 | 20030718 |
|    | WO 2004009665 | A3   | 20040624 |                 |          |
|    | W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |          |
|    | RW:           | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  |          |                 |          |

|      |   |    |                                   |
|------|---|----|-----------------------------------|
|      | FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,<br>BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG |    |                                   |
| CA   | 2493674   | A1 | 20040129 CA 2003-2493674 20030718 |
| AU   | 2003254066  | A1 | 20040209 AU 2003-254066 20030718  |
| EP   | 1545462   | A2 | 20050629 EP 2003-765852 20030718  |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  |    |                                   |
| US   | 2006216265  | A1 | 20060928 US 2005-522128 20050119  |
| IN   | 2005DN00607   | A  | 20070119 IN 2005-DN607 20050216   |
| PRAI | US 2002-397319P   | P  | 20020719                          |
| WO   | 2003-US22771  | W  | 20030718                          |

L7 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Dendrimers with inherently axially chiral units

AB We have designed and successfully synthesized dendrimers with axially chiral units in the interior structure. Starting from chiral 2,2'-dimethoxy-1,1'-binaphthalene building blocks and from the four-directional initiator cores the dendritic homochiral and heterochiral oligomers 9-16 were prepared Using the  $[\phi]D$  and  $\Delta\epsilon$  values of monomers 2 and 4, we calculated  $[\phi]D$  and  $\Delta\epsilon$  values for dendrons 11, 13, and dendrimers 9, 10, 15 and 16. Although the observed molar optical rotation  $[\phi]D$  of the dendrimers agrees relatively well with the calculated values, the CD measurements of all the dendrimers in THF and CH<sub>2</sub>Cl<sub>2</sub>, except that of heterochiral dendrimer 16 in THF, were significantly different from the calculated values. The intensive hypochromism of the dendrimers (between 37-59% in THF) and the agreement between the calculated and observed  $\Delta\epsilon$  values of the dendrons (between 14 and 6% in THF) led to the assumption that the hypochromic effect is caused by intramol. interactions. From the NMR measurements it was proved that in the homochiral dendrimer, the N-H groups of the amides can form intramol. hydrogen bonds that in CHCl<sub>3</sub>, with the help of the axially chiral moieties, cause a different conformation of the mol. than in the diastereomeric dendrimer.

AN 2000:246986 HCAPLUS <<LOGINID::20070703>>

DN 133:105420

TI Dendrimers with inherently axially chiral units

AU Lellek, Vit; Stibor, Ivan

CS Department of Organic Chemistry, University of Zurich, Zurich, CH-8057, Switz.

SO Journal of Materials Chemistry (2000), 10(5), 1061-1073

CODEN: JMACEP; ISSN: 0959-9428

PB Royal Society of Chemistry

DT Journal

LA English

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Solution phase biopolymer synthesis of oligodeoxyribonucleotides using multifunctional liquid phase carriers

AB Multifunctional liquid phase carriers (LPCs) and methods of using LPCs for the preparation of biopolymers are provided. The LPCs are highly sym. compds. that possess more than two points of attachment for biopolymer synthesis. The LPCs have the formula Sp(X1)<sub>n</sub>, where Sp is a highly sym. moiety such that all X1 groups are equivalent X1 is a functional group that is suitable for biopolymer synthesis, including OH, SH, NH<sub>2</sub>, COOH and the like. Biopolymers that may be produced using the methods provided include oligonucleotides, peptides, protein nucleic acids (PNAs) and oligosaccharides. Analogs of the biopolymers may also be prepared using the methods. Thus decamer d(GACCGGCAGT) was prepared using multifunctional liquid phase carriers.

AN 1999:708779 HCAPLUS <<LOGINID::20070703>>

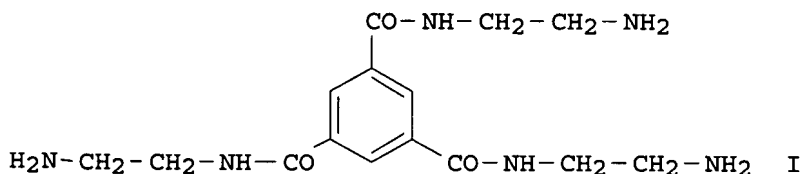
DN 131:351620

TI Solution phase biopolymer synthesis of oligodeoxyribonucleotides using

multifunctional liquid phase carriers  
 IN Koster, Hubert; Worl, Ralf  
 PA USA  
 SO PCT Int. Appl., 88 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | WO 9955718  | A2   | 19991104 | WO 1999-US8939  | 19990426 |
|      | WO 9955718  | A3   | 19991216 |                 |          |
|      | W:  |      |          |                 |          |
|      | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, |      |          |                 |          |
|      | DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, |      |          |                 |          |
|      | JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MD, MG, MK, MN, |      |          |                 |          |
|      | MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, |      |          |                 |          |
|      | TR, TT, UA, UG, UZ, VN, YU, ZA, ZW                              |      |          |                 |          |
|      | RW:   |      |          |                 |          |
|      | GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, |      |          |                 |          |
|      | ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, |      |          |                 |          |
|      | CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG                      |      |          |                 |          |
|      | US 2002016451   | A1   | 20020207 | US 1998-67337   | 19980427 |
|      | US 7094943  | B2   | 20060822 |                 |          |
|      | AU 9936643  | A    | 19991116 | AU 1999-36643   | 19990426 |
|      | EP 1073668  | A2   | 20010207 | EP 1999-918819  | 19990426 |
|      | R:  |      |          |                 |          |
|      | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, |      |          |                 |          |
|      | IE, SI, LT, LV, FI, RO  |      |          |                 |          |
|      | US 2002007048   | A1   | 20020117 | US 2000-484484  | 20000118 |
|      | US 7038103  | B2   | 20060502 |                 |          |
| PRAI | US 1998-67337   | A    | 19980427 |                 |          |
|      | WO 1999-US8939  | W    | 19990426 |                 |          |

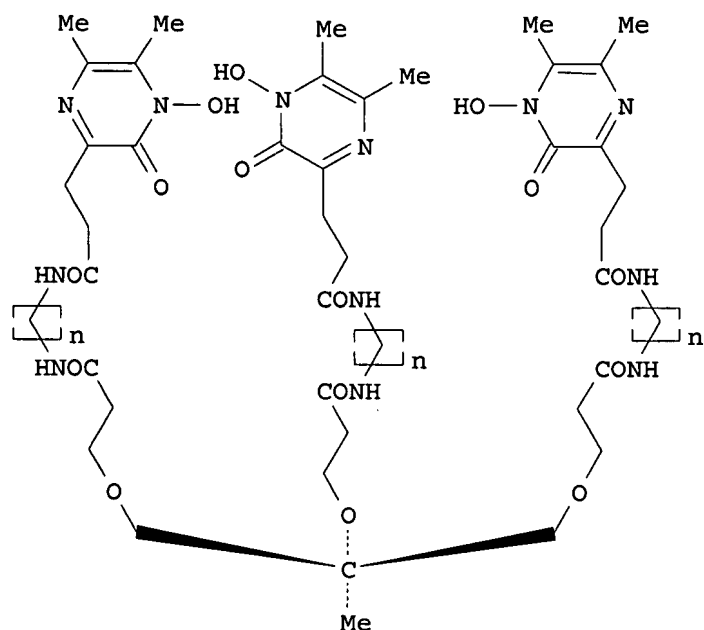
L7 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Synthesis of new liquid phase carriers for use in large scale  
 oligodeoxyribonucleotide synthesis in solution  
 GI



AB The synthesis of multifunctional sym. primary amines, e.g. I, and the covalent binding of 5'-O-dimethoxytrityl-deoxynucleoside derivs. to their amino groups is described. Different strategies for dedimethoxytritylation including the use of strong acidic ion exchangers or protic acids and modified silica gels and/or gel permeation chromatog. are developed. The resulting liquid phase carriers are suitable for large scale oligodeoxyribonucleotide synthesis in solution using phosphoramidites and gel permeation chromatog. for fast isolation of intermediates.  
 AN 1999:176579 HCAPLUS <<LOGINID::20070703>>  
 DN 130:267701  
 TI Synthesis of new liquid phase carriers for use in large scale oligodeoxyribonucleotide synthesis in solution  
 AU Worl, Ralf; Koster, Hubert  
 CS Faculty of Chemistry, Department of Biochemistry and Molecular Biology, University of Hamburg, Hamburg, D-20146, Germany

SO Tetrahedron (1999), 55(10), 2941-2956  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI N-hydroxyamide-containing heterocycles. Part 5. Synthesis of novel  
 hexadentate ligands composed of N-hydroxy-2(1H)-pyrazinone, aliphatic  
 diamine, and 1,1,1-tris(carboxyethoxymethyl)ethane, and properties of  
 their ferric complexes  
 GI



AB Novel hexadentate ligands I ( $n = 2, 4, 5, 6$ ), containing N-hydroxy-2(1H)-  
 pyrazinone connected to tricarboxylic acid by an aliphatic diamine through  
 amide bonds were synthesized. UV-visible spectra of the 1:1 M mixts. of I  
 and ferric ion in aqueous solution and the mole ratio plot strongly supported  
 the

formation of intramol. 1:1 ferric complexes. The relative stability  
 consts. ( $\log K$  20.6-21.7) of the complexes were affected by the spacer  
 length in a mol. Further, I showed higher Fe removal efficiency toward  
 human transferrin than naturally occurring siderophore, desferrioxamine B.

AN 1995:956600 HCAPLUS <<LOGINID::20070703>>  
 DN 124:157320

TI N-hydroxyamide-containing heterocycles. Part 5. Synthesis of novel  
 hexadentate ligands composed of N-hydroxy-2(1H)-pyrazinone, aliphatic  
 diamine, and 1,1,1-tris(carboxyethoxymethyl)ethane, and properties of  
 their ferric complexes

AU Ohkanda, Junko; Katoh, Akira  
 CS Dep. Industrial Chem., Seikei Univ., Musashino, 180, Japan  
 SO Tetrahedron (1995), 51(47), 12995-3002  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier

DT Journal  
LA English

=> file stnguide

|  |            |         |
|--|------------|---------|
| COST IN U.S. DOLLARS                       | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| FULL ESTIMATED COST                        | 22.41      | 422.90  |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| CA SUBSCRIBER PRICE                        | -5.46      | -7.80   |

FILE 'STNGUIDE' ENTERED AT 16:50:18 ON 03 JUL 2007  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Jun 29, 2007 (20070629/UP).

=> d l22 1-2 ti abs bib  
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L22 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Determination of the upper size limit for uptake and processing of ligands by the asialoglycoprotein receptor on hepatocytes in vitro and in vivo  
AB The asialoglycoprotein receptor (ASGPr) on hepatocytes plays a role in the clearance of desialylated proteins from the serum. Although its sugar preference (N-acetylgalactosamine (GalNAc) » galactose) and the effects of ligand valency (tetraantennary > triantennary » diantennary » monoantennary) and sugar spacing (20 Å » 10 Å » 4 Å) are well documented, the effect of particle size on recognition and uptake of ligands by the receptor is poorly defined. In the present study, we assessed the maximum ligand size that still allows effective processing by the ASGPr of mouse hepatocytes in vivo and in vitro. Hereto, we synthesized a novel glycolipid, which possesses a highly hydrophobic steroid moiety for stable incorporation into liposomes, and a triantennary GalNAc3-terminated cluster glycoside with a high nanomolar affinity (2 nM) for the ASGPr. Incorporation of the glycolipid into small (30 nm) [3H]cholesteryl oleate-labeled long circulating liposomes (1-50%, weight/weight) caused a concentration-dependent increase in particle clearance that was liver-specific (reaching 85±7% of the injected dose at 30 min after injection) and mediated by the ASGPr on hepatocytes, as shown by competition studies with asialoorosomucoid in vivo. By using glycolipid-laden liposomes of various sizes between 30 and 90 nm, it was demonstrated that particles with a diameter of >70 nm could no longer be recognized and processed by the ASGPr in vivo. This threshold size for effective uptake was not related to the phys. barrier raised by the fenestrated sinusoidal endothelium, which shields hepatocytes from the circulation, because similar results were obtained by studying the uptake of liposomes on isolated mouse hepatocytes in vitro. From these data we conclude that in addition to the species, valency, and orientation of sugar residues, size is also an important determinant for effective recognition and processing of substrates by the ASGPr. Therefore, these data have important implications for the design of ASGPr-specific carriers that are aimed at hepatocyte-directed delivery of drugs and genes.  
AN 2001:763729 HCAPLUS <<LOGINID::20070703>>  
DN 137:37497  
TI Determination of the upper size limit for uptake and processing of ligands by the asialoglycoprotein receptor on hepatocytes in vitro and in vivo

AU Rensen, Patrick C. N.; Sliedregt, Leo A. J. M.; Ferns, Michiel; Kieviet, Erwin; Van Rossenberg, Sabine M. W.; Van Leeuwen, Steven H.; Van Berkel, Theo J. C.; Biessen, Erik A. L.  
CS Division of Biopharmaceutics, Leiden/Amsterdam Center for Drug Research, Sylvius Laboratory, University of Leiden, Leiden, 2300 RA, Neth.  
SO Journal of Biological Chemistry (2001), 276(40), 37577-37584  
CODEN: JBCHA3; ISSN: 0021-9258  
PB American Society for Biochemistry and Molecular Biology  
DT Journal  
LA English  
RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Binding and endocytosis of cluster glycosides by rabbit hepatocytes. Evidence for a short-circuit pathway that does not lead to degradation  
AB Synthetic cluster glycosides containing either 1, 2, or 3 galactosyl or lactosyl residues per ligand were used to test the effect of carbohydrate clustering on binding by the rabbit hepatic galactose/N-acetylgalactosamine-binding lectin using either isolated rabbit hepatocytes or the solubilized, affinity-purified lectin. The tris- and bis-glycosides were superior to the mono-glycosides for inhibition of 125I-labeled asialoorosomucoid binding to rabbit hepatocytes at 0°. The concns. of the tris-glycosides required for 50% inhibition of 125I-labeled asialoorosomucoid binding (4-8 µM) to hepatocytes were 50-100-fold lower than the concns. of the corresponding mono-glycosides required for 50% inhibition (400-500 µM). The isolated lectin, however, did not effectively discriminate between the mono-, bis-, and tris-glycosides, possibly indicating an organizational difference between the lectin the cell membrane and the isolated lectin. When the cluster glycosides were labeled with 125I-labeled tyrosine, it was shown that the tris- and bis-galactosides were bound to the hepatocytes at 37°, and that binding was followed by a step that led to EGTA resistance, probably internalization. The process could be specifically inhibited by the neoglycoprotein β-D-galactopyranosylthioacetamido-bovine serum albumin with 44 residues of galactose attached or by IgG specific for the hepatic lectin, but not by preimmune IgG. Internalization of the cluster glycosides did not lead to accumulation of ligand inside the cell or to degradation. Instead, the ligands were quickly released from the cells.  
AN 1982:101464 HCAPLUS <<LOGINID::20070703>>  
DN 96:101464

TI Binding and endocytosis of cluster glycosides by rabbit hepatocytes. Evidence for a short-circuit pathway that does not lead to degradation  
AU Connolly, Daniel T.; Townsend, R. Reid; Kawaguchi, Kichitaro; Bell, William R.; Lee, Yuan Chuan  
CS Dep. Biol., Johns Hopkins Univ., Baltimore, MD, 21218, USA  
SO Journal of Biological Chemistry (1982), 257(2), 939-45  
CODEN: JBCHA3; ISSN: 0021-9258  
DT Journal  
LA English

=> d hid  
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FILE 'REGISTRY' ENTERED AT 16:38:17 ON 03 JUL 2007

L1 STRUCTURE UPLOADED

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L5                   9 S L1 SSS FULL  
L6                   0 S L2 SSS FULL

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FILE 'HCAPLUS' ENTERED AT 16:41:47 ON 03 JUL 2007  
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L8                   1088933 S (NUCLEIC(W)ACID OR DNA OR RNA)  
L9                   8739 S (SHORT(W)INTERFERING(W)RNA) OR SIRNA  
L10                   30 S (CLUSTER(W)GLYCOSIDE)  
L11                   22056 S GLUCOSAMINE  
L12                   216523 S ENDOCYTOSIS OR (DRUG(W)DELIVERY)

FILE 'STNGUIDE' ENTERED AT 16:42:36 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:43:43 ON 03 JUL 2007  
L13                   0 S L8 AND L10 AND L11  
L14                   702 S L9 AND L12

FILE 'STNGUIDE' ENTERED AT 16:43:45 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:44:17 ON 03 JUL 2007  
L15                   0 S L14 AND L10  
L16                   0 S L8 AND L10

FILE 'STNGUIDE' ENTERED AT 16:44:19 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:44:48 ON 03 JUL 2007  
L17                   57 S L8 AND L11 AND L12

FILE 'STNGUIDE' ENTERED AT 16:44:50 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:45:37 ON 03 JUL 2007

FILE 'STNGUIDE' ENTERED AT 16:45:40 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:45:49 ON 03 JUL 2007  
L18                   37 S L17 AND (AY<2003 OR PY<2003 OR PRY<2003)

FILE 'STNGUIDE' ENTERED AT 16:45:52 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:46:05 ON 03 JUL 2007

FILE 'STNGUIDE' ENTERED AT 16:46:06 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:47:50 ON 03 JUL 2007

FILE 'STNGUIDE' ENTERED AT 16:47:51 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:48:46 ON 03 JUL 2007  
L19                   22 S L10 AND (PY<2003 OR AY<2003 OR PRY<2003)

FILE 'STNGUIDE' ENTERED AT 16:48:49 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:48:58 ON 03 JUL 2007

FILE 'STNGUIDE' ENTERED AT 16:48:59 ON 03 JUL 2007  
L20                   0 S L19 AND L12  
L21                   0 S L19 AND L12

FILE 'HCAPLUS' ENTERED AT 16:50:14 ON 03 JUL 2007

L22

2 S L19 AND L12

FILE 'STNGUIDE' ENTERED AT 16:50:18 ON 03 JUL 2007

FILE 'HCAPLUS' ENTERED AT 16:50:41 ON 03 JUL 2007

FILE 'STNGUIDE' ENTERED AT 16:50:41 ON 03 JUL 2007

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.06

431.28

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-9.36

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 16:50:51 ON 03 JUL 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*

SESSION RESUMED IN FILE 'STNGUIDE' AT 17:04:25 ON 03 JUL 2007

FILE 'STNGUIDE' ENTERED AT 17:04:25 ON 03 JUL 2007

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.06

431.28

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-9.36

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.06

431.28

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-9.36

FILE 'HCAPLUS' ENTERED AT 17:05:07 ON 03 JUL 2007

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FILE COVERS 1907 - 3 Jul 2007 VOL 147 ISS 2  
FILE LAST UPDATED: 2 Jul 2007 (20070702/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s dendrimer or glucosamine

8548 DENDRIMER  
22056 GLUCOSAMINE  
L23 30590 DENDRIMER OR GLUCOSAMINE

=> s l14 and l23

L24 8 L14 AND L23

=> file stnguide

|  |            |         |
|--|------------|---------|
| COST IN U.S. DOLLARS                       | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| FULL ESTIMATED COST                        | 2.60       | 433.88  |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| CA SUBSCRIBER PRICE                        | 0.00       | -9.36   |

FILE 'STNGUIDE' ENTERED AT 17:05:10 ON 03 JUL 2007  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Jun 29, 2007 (20070629/UP).

=> d l24 1-8 ti

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L24 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Double-stranded RNAs and their use for downregulating genes and treating cardiovascular diseases

L24 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Toxicogenomics of drug delivery systems: exploiting delivery system-induced changes in target gene expression to enhance siRNA activity

L24 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Intracellular delivery of oligonucleotide conjugates and dendrimer complexes

L24 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Potential Use of Dendrimer/ $\alpha$ -Cyclodextrin Conjugate as a Novel Carrier for Small Interfering RNA (siRNA)

L24 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Small interfering RNA preparation for prevention or treatment of respiratory system diseases, and its screening method

L24 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI The design and exogenous delivery of siRNA for  
 post-transcriptional gene silencing

L24 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Regeneration associated genes (RAGs) polypeptides, nucleic acids, and their  
 use in related neuronal disease treatment and drug screening

L24 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Delivery of siRNAs

=> d l24 2 3 4 6 8 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L24 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Toxicogenomics of drug delivery systems: exploiting  
 delivery system-induced changes in target gene expression to enhance  
 siRNA activity

AB Synthetic siRNAs are typically formulated with drug  
 delivery systems (DDS) that improve cellular uptake for optimal  
 gene silencing activity. Here, we show that two PAMAM dendrimer  
 DDS, differing only in their structural architecture, elicit many  
 different gene expression changes in human cells including opposing  
 effects on the expression of epidermal growth factor receptor (EGFR), a  
 gene targeted for silencing by siRNA. Despite providing similar  
 improvements in siRNA uptake, these two formulations led to a  
 .apprx. 10-fold variation in anti-EGFR siRNA activity. These  
 data show that gene expression changes induced by DDS, sep. from their  
 ability to enhance cell uptake, determine 'apparent' siRNA potency  
 and thus offer the possibility of tailoring delivery system-siRNA  
 combinations for additive or synergistic effects on gene silencing.

AN 2007:168126 HCAPLUS <<LOGINID::20070703>>  
 DN 146:212445

TI Toxicogenomics of drug delivery systems: exploiting  
 delivery system-induced changes in target gene expression to enhance  
 siRNA activity

AU Hollins, Andrew J.; Omid, Yadollah; Benter, Ibrahim F.; Akhtar, Saghir  
 CS Centre for Genome Based therapeutics, Cardiff University School of  
 Pharmacy, Cardiff, CF10 3XF, UK

SO Journal of Drug Targeting (2007), 15(1), 83-88  
 CODEN: JDTAEH; ISSN: 1061-186X

PB Informa Healthcare  
 DT Journal  
 LA English

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Intracellular delivery of oligonucleotide conjugates and dendrimer  
 complexes

AB Enhancing the delivery of antisense and siRNA mols. to cells and  
 tissues is a key issue for oligonucleotide therapeutics. Cell-penetrating  
 peptides (CPPs) have the ability to convey linked "cargo" mols. into the  
 cytosol; thus we have explored the use of CPPs as delivery agents for  
 oligonucleotides. We have extensively evaluated CPP-oligonucleotide  
 conjugates, and have recently begun to explore the use of CPP-  
 dendrimer-oligonucleotide complexes. We have found that  
 CPP-antisense oligonucleotide conjugates can be taken up by cells and can  
 effectively modify gene expression in cell culture and in tissues.  
 Although not as potent in cell culture as cationic lipid delivery agents,

CPP-oligonucleotide conjugates offer the advantage of being mols. rather than particles, and may have substantial advantages over particle-based delivery in the in vivo setting.

AN 2007:69727 HCAPLUS <<LOGINID::20070703>>

DN 146:235694

TI Intracellular delivery of oligonucleotide conjugates and dendrimer complexes

AU Juliano, R. L.

CS Department of Pharmacology, School of Medicine, University of North Carolina, Chapel Hill, NC, 27599, USA

SO Annals of the New York Academy of Sciences (2006), 1082(Oligonucleotide Therapeutics), 18-26

CODEN: ANYAA9; ISSN: 0077-8923

PB Blackwell Publishing, Inc.

DT Journal

LA English

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Potential Use of Dendrimer/ $\alpha$ -Cyclodextrin Conjugate as a Novel Carrier for Small Interfering RNA (siRNA)

AB RNA interference (RNAi) is the mechanism of gene silencing-mediated mRNA degradation by small interference RNA (siRNA), which becomes a powerful tool for genetic anal. and novel gene therapy. However, one of the major obstacles for siRNA delivery is the difficulty to cross the biol. membrane due to its hydrophilicity and high mol. weight. We evaluated the potential use of the starburst polyamidoamine dendrimer (generation 3) conjugate with  $\alpha$ -cyclodextrin ( $\alpha$ -CyD) having an average degree of substitution of 2.4 ( $\alpha$ -CDE conjugate) as a siRNA carrier for RNAi. The ternary complex composed of pGL2 control vector (pDNA)/pGL2 siRNA/ $\alpha$ -CDE conjugate showed higher pGL2 siRNA sequence-specific gene silencing effects without off-target effects than those of com. transfection reagents such as Lipofectamine 2000, TransFast and Lipofectin. These results suggest that  $\alpha$ -CDE conjugate has the potential to be a novel carrier for siRNA.

AN 2006:1101503 HCAPLUS <<LOGINID::20070703>>

DN 146:107086

TI Potential Use of Dendrimer/ $\alpha$ -Cyclodextrin Conjugate as a Novel Carrier for Small Interfering RNA (siRNA)

AU Tsutsumi, Toshihito; Arima, Hidetoshi; Hirayama, Fumitoshi; Uekama, Kaneto  
CS Graduate School of Pharmaceutical Sciences, Kumamoto University, Oe-honmachi, Kumamoto, 862-0973, Japan

SO Journal of Inclusion Phenomena and Macrocyclic Chemistry (2006), 56(1-2), 81-84

CODEN: JIPCF5; ISSN: 1388-3127

PB Springer

DT Journal

LA English

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

TI The design and exogenous delivery of siRNA for post-transcriptional gene silencing

AB A review. RNA interference (RNAi) is a natural cellular process that effects post-transcriptional gene silencing in eukaryotic systems. Small interfering RNA (siRNA) mols. are the key intermediaries in this process which when exogenously administered can inhibit or "silence" the expression of any given target gene. Thus, siRNA mols. hold great promise as biol. tools and as potential therapeutic agents for targeted inhibition of disease-causing genes. However, key challenges to the effective and widespread use of these polyanionic, macromol. duplexes

of RNA are their appropriate design and efficient delivery to cells in vitro and in vivo. This review highlights the current strategies used in the design of effective siRNA mols. and also summarizes the main strategies being considered for the exogenous delivery of siRNA for both in vitro and in vivo applications.

AN 2004:847064 HCAPLUS <<LOGINID::20070703>>  
 DN 142:140890  
 TI The design and exogenous delivery of siRNA for post-transcriptional gene silencing  
 AU Gilmore, Ian R.; Fox, Stéphen P.; Hollins, Andrew J.; Sohail, Muhammad; Akhtar, Saghir  
 CS Centre for Genome-based Therapeutics, The Welsh School of Pharmacy, Cardiff University, Cardiff, CF10 3XF, UK  
 SO Journal of Drug Targeting (2004), 12(6), 315-340  
 CODEN: JDTAEH; ISSN: 1061-186X  
 PB Taylor & Francis Ltd.  
 DT Journal; General Review  
 LA English  
 RE.CNT 166 THERE ARE 166 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Delivery of siRNAs  
 AB The present invention provides siRNA delivery methods for use in vivo or in vitro. The delivery methods include conjugation with delivery peptides and mixing with dendrimers.  
 AN 2004:471006 HCAPLUS <<LOGINID::20070703>>  
 DN 141:42890  
 TI Delivery of siRNAs  
 IN Rana, Tariq M.  
 PA University of Massachusetts, USA  
 SO PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

| PATENT NO.           | KIND   | DATE     | APPLICATION NO. | DATE     |
|----------------------|--|----------|-----------------|----------|
| PI WO 2004048545     | A2   | 20040610 | WO 2003-US37886 | 20031124 |
| WO 2004048545        | A3   | 20050421 |                 |          |
| W:                   | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |          |
| RW:                  | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |
| CA 2506714           | A1   | 20040610 | CA 2003-2506714 | 20031124 |
| AU 2003298724        | A1   | 20040618 | AU 2003-298724  | 20031124 |
| US 2004204377        | A1   | 20041014 | US 2003-722176  | 20031124 |
| EP 1585756           | A2   | 20051019 | EP 2003-796481  | 20031124 |
| R:                   | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |          |                 |          |
| PRAI US 2002-430520P | P  | 20021126 |                 |          |
| WO 2003-US37886      | W  | 20031124 |                 |          |